

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application.

Listing Of Claims

1. (Currently amended) A composition comprising a protein in crystalline form wherein the protein ~~consists~~ has at least 90% identity with residues 2-384 of SEQ. ID No. 1.
2. (Cancelled)
3. (Cancelled)
4. (Currently amended) A composition according to claim 1 wherein the protein crystal diffracts X-rays for a determination of structure coordinates to a resolution greater than 3.0 Angstroms.
5. (Original) A composition according to claim 1 wherein the protein crystal has a crystal lattice in a $P2_12_12_1$ space group.
6. (Original) A composition according to claim 1 wherein the protein crystal has a crystal lattice having unit cell dimensions, +/- 5%, of $a=68.7$ $b=79.6$ $c=150.2$, $\alpha=\beta=\gamma=90$.
7. (Currently amended) A method ~~for forming a crystal of a protein~~ comprising:
forming a crystallization volume comprising ~~[[:]]~~ a precipitant solution and a protein ~~wherein at least a portion of the protein has at least 90% identity with residues 2-384~~ consisting of SEQ. ID No. 1; and
storing the crystallization volume under conditions suitable for crystal formation of the protein.
8. (Cancelled)
9. (Cancelled)

10. (Currently amended) A method according to claim 7 wherein ~~the~~ a protein crystal is formed that diffracts X-rays for a determination of structure coordinates to a resolution greater than 3.0 Angstroms.
11. (Currently amended) A method according to claim 7 wherein ~~the~~ a protein crystal is formed that has a crystal lattice in a $P2_12_12_1$ space group.
12. (Currently amended) A method according to claim 7 wherein ~~the~~ a protein crystal is formed that has a crystal lattice having unit cell dimensions, +/- 5%, of $a=68.7$ $b=79.6$ $c=150.2$, $\alpha=\beta=\gamma=90$.
13. (Currently amended) A method according to claim 7, wherein a protein crystal is formed, the method further comprising diffracting the protein crystal to produce a diffraction pattern and solving the structure of the protein from the diffraction pattern.
14. (Cancelled)
15. (Cancelled)
16. (Currently Amended) A composition comprising ~~an isolated~~ a protein consisting of SEQ. ID No. 1.
17. ~~A~~ The method according to claim 13, the method further comprising: ~~of identifying an entity that associates with a protein comprising:~~
~~taking structure coordinates from diffraction data obtained from a crystal of a protein that has at least 90% identity with SEQ. ID No. 1; and~~
~~performing rational drug design using the solved structure; and a three dimensional structure that is based on the obtained structure coordinates.~~
identifying an entity that associates with the protein crystal.
18. (Cancelled)
19. (Currently Amended) A method according to claim 17 wherein the protein crystal has a

crystal lattice having unit cell dimensions, +/- 5%, of $a=68.7$ $b=79.6$ $c=150.2$, $\alpha=\beta=\gamma=90$.

20. (Currently Amended) A method according to claim ~~47~~ 13, the method further comprising selecting one or more entities based on the rational drug design and contacting the selected entities with the protein.

21. (Currently Amended) A method according to claim ~~47~~ 13, the method further comprising measuring an activity of the protein when contacted with the one or more entities.

22. (Currently Amended) A method according to claim ~~47~~ 13, the method further comprising comparing activity of the protein in a presence of and in the absence of the one or more entities; and selecting entities where activity of the protein changes depending whether a particular entity is present.

23. (Currently Amended) A method according to claim ~~47~~ 13, the method further comprising contacting cells expressing the protein with the one or more entities and detecting a change in a phenotype of the cells when a particular entity is present.